

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Applicants gratefully acknowledge the indication of allowable subject matter in claims 17 and 21-25.

Claim 13 was rejected as allegedly anticipated under 35 U.S.C. §102(e) by Yamada. Claims 13-16 and 18-20 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by Dam. Applicants respectfully traverse.

Fig. 1 of Yamada shows a piezoceramic multilayer actor which is also divided into three portions, a middle portion 111, called "drive portion", the "buffer portions 112" and the "dummy portions 113" at the end in each case. The manufacture is described on page 7, margin numbers [0146] to [0159]. Yamada is silent about why the actor has the construction according to Fig. 1 and what advantages are achieved by this construction. In the so-called "buffer portions 112" the spacing of the internal electrodes is constant. Yamada apparently does not reveal whether the expansion characteristic of portion 112 is different from the "drive portion 111".

In Dam et al, at the ends of the actor the thickness of the ceramic layers 208, 206 and 202 increases in steps better defined on page 7, lines 10 to 14. The difference between the actor according to the claimed invention and the actor of Yamada lies in the fact that the layers of the ceramic plates are not sintered together into a monolith, as described in Applicants' specification at page 7, line 27 to page 8, line 14. Dam describe that it is an advantage of their actor that, in case of great stress, the ceramic plates, as active layers of the actor, do not break.

On the basis of the different construction, monolithic block in Yamada, and plates laid loosely on one another as in Dam, there is no common agreement with respect to the actions of two actors.

Neither Yamada and Dam disclose that the transition portion -the "buffer portions 112" in Yamada and layers 208 and 206 in Dam - has a shrinking and expanding behavior which is between the shrinking and expanding behavior of the active layer and the shrinking and expanding behavior of the end portion. According to the claimed invention, it is, for the first time, expressly taught and claimed that the actor has regions of different shrinkage and different expansion.

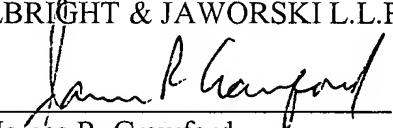
In view of the foregoing, allowance of all pending claims is respectfully requested.

Any fees due that are not provided herewith may be charged to deposit account no. 50-0624.

Respectfully submitted,

FULBRIGHT & JAWORSKI L.L.P.

By


James R. Crawford
Reg. No. 39,155

666 Fifth Avenue
New York, NY 10103
212-318-3148

Date: 7/16/03